

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: March 1, 2001, 16:18:27 ; Search time 64.32 seconds
(without alignments)
11.164 Million cell updates/sec

Title: US-09-331-631A-38

Perfect score: 53
Sequence: 1 CXXXXXXXXXXXXXXXXCXXC 21

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 268485 seqs, 34193795 residues

Total number of hits satisfying chosen parameters: 268485

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

A_Geneseq_36:*

- 1: /SIDSI/gcgdata/geneseq/geneseq/AA1980.DAT:*
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- 20: /SIDSI/gcgdata/geneseq/geneseq/AA1999.DAT:*
- 21: /SIDSI/gcgdata/geneseq/geneseq/AA2000.DAT:*

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	53	100.0	31	21	Wnt antagonist pro
2	53	100.0	40	12	Exon II encoded by
3	53	100.0	49	17	Mutant disintegrin
4	53	100.0	57	21	Crab metallochione
5	53	100.0	57	21	Human secreted pro
6	53	100.0	58	20	Mature nematode ex
7	53	100.0	61	20	Adult insect - selec
8	53	100.0	70	11	Adult encoded by co
9	53	100.0	70	12	Adult encoded by na
10	53	100.0	70	15	Adult encoded by th
11	53	100.0	70	15	Adult encoded by th
12	53	100.0	70	15	Adult encoded by th

13	53	100.0	70	19	W48669	Androctonus australis
14	53	100.0	71	12	R12378	AaIT scorpion toxin
15	53	100.0	73	12	R10870	Exon I encoded by
16	53	100.0	76	17	R91703	HpnMAP5, Heligomo
17	53	100.0	76	17	W05263	Hawksbill turtle s
18	53	100.0	76	20	Y30389	Nematode extracted
19	53	100.0	76	20	Y30403	Nematode extracted
20	53	100.0	77	17	W05265	Hawksbill turtle s
21	53	100.0	77	18	W36518	Tortoise shell str
22	53	100.0	79	17	R91704	Nannap, Necator a
23	53	100.0	79	20	Y30412	Nematode extracted
24	53	100.0	79	21	Y64946	Human 5' EST relat
25	53	100.0	86	16	R64267	Androctonus australis
26	53	100.0	89	12	R11174	SP-IT fusion prote
27	53	100.0	89	13	R25469	PCIB4223, Synthet
28	53	100.0	89	21	Y44584	M. sexta ADK signa
29	53	100.0	98	21	Y65429	Human 5' EST relat
30	53	100.0	107	21	Y65657	C. elegans Insulin
31	53	100.0	109	17	R49086	T-lymphocyte stimu
32	53	100.0	110	21	Y44986	Human epidermal pr
33	53	100.0	111	13	R26050	MSF-K130, Synthet
34	53	100.0	115	20	Y22170	Drosophila AcP62P
35	53	100.0	124	19	W66732	Nucleus specific
36	53	100.0	135	21	Y91429	Human secreted pro
37	53	100.0	138	13	R26820	CA45 protein. Ze
38	53	100.0	149	8	P70057	Human insulin rece
39	53	100.0	169	20	Y60558	Human normal bladd
40	53	100.0	182	12	R10872	Protein encoded by
41	53	100.0	246	19	W53007	Mus musculus I-mfa
42	53	100.0	252	18	W15773	Protein cognate of
43	53	100.0	257	17	W05502	HCV Toledo strain
44	53	100.0	285	9	P82114	Pepide corresp. t
45	53	100.0	369	11	R05637	Placenta-specific

ALIGNMENTS

RESULT 1	Y70731	standard; protein: 31 AA.
ID	Y70731	
XX	24-JUL-2000	(first entry)
XX	Wnt antagonist protein consensus sequence-1.	
XX	Wnt antagonist; contraceptive; contraceptive vaccine; oocyte development;	
XX	female primate contraception; oocyte viability.	
OS	Synthetic.	
XX	Location/Qualifiers	
XX	Key	
XX	Misc-difference 2	/label= Unknown
XX	Misc-difference 4	/note= "Xaa may be 9 amino acids in length; some amino acids may be absent"
XX	Misc-difference 14	/label= Unknown
XX	Misc-difference 15	/label= Unknown
XX	Misc-difference 16	/label= Unknown
XX	Misc-difference 17	/label= Unknown
XX	Misc-difference 18	/label= Unknown
XX	Misc-difference 19	/label= Unknown

FT Misc-difference 21 /label= Unknown
FT /label= Unknown
FT /note= "Xaa may be 10 amino acids in length; some
FT amino acids may be absent"
FT Misc-difference 23
FT /label= Unknown
FT Misc-difference 24
FT /label= Unknown
FT Misc-difference 25
FT /label= Unknown
FT Misc-difference 27
FT /label= Unknown
FT /note= "Xaa may be 7 amino acids in length; some
FT amino acids may be absent"
FT Misc-difference 29
FT /label= Unknown
FT /note= "Xaa may be 27 amino acids in length; some
FT amino acids may be absent"
FT Misc-difference 31
FT /label= Unknown
FT /note= "Xaa may be 13 amino acids in length; some
FT amino acids may be absent"
PW WO200021555-A1.
XX 20-APR-2000.
XX 13-OCT-1999; 99WO-US23640.
XX 15-OCT-1998; 98US-0104355.
XX (HARD) HARVARD COLLEGE.
XX PA
XX McMahon AP, Parr BA, Vaino S;
XX WPI: 2000-317845/27.
XX DR
XX Contraceptive composition for inhibiting oocyte development in a female
PT primate comprises a Wnt polypeptide antagonist -
XX
PS Claim 12; Page 44; 57pp; English.
XX
XX The patent discloses a method of female primate contraception comprising
CC administering an antagonist of a Wnt polypeptide, inhibiting oocyte
CC development. Wnt polypeptides are useful for promotive maturation of an
CC immature oocyte. Wnt polypeptides are also useful for increasing the
CC number of mature oocytes and to enhance oocyte viability. The present
CC peptide is a consensus sequence of Wnt antagonist which inhibits the
CC physiological activity of a Wnt polypeptide. Antagonistic polypeptides
CC may contain a cysteine-rich domain.
XX
SQ Sequence 31 AA:

Query Match 100.0%; Score 53; DB 21; Length 31;
Best Local Similarity 66.7%; Pred. No. 1.1e+02;
Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 1 CXXXCXXXXXXXXXXCXXC 21
|::|::|::|::|::|::|::|
DB 6 cccccccccccccccxcxcxc 26

RESULT 2
ID R11372
XX R11372 standard; Protein; 40 AA.
XX R11372;
XX 08-MAY-1991 (first entry)
XX Exon II encoded by genomic meg-CSF clone.
DE

XX Megakaryocyte colony stimulating factor; platelet deficiency;
KW bleeding disorder.
XX
XX Homo sapiens.
XX WO9102001-A.
XX PN
XX 21-FEB-1991.
XX PD
XX 07-AUG-1990; 90WO-US04421.
XX PF
XX 29-JUN-1990; 90US-0546114.
XX PR 08-AUG-1989; 89US-0390901.
XX PR 28-DEC-1989; 89US-0457196.
XX
XX (GENE-) GENETICS INST INC.
XX PA
XX Gesner TG, Clark SC, Turner K, Hewick RM;
XX PI
XX WPI: 1991-073490/10.
XX DR N-PSDB; Q10580.
XX
XX New mega:karyocyte colony stimulating factor protein - regulates
PT human haematopoiesis by stimulating growth and development of
PT mega:karyocyte(s) in treatment of e.g. plastic anaemia
XX
XX Claim 3; Page 85; 204pp; English.
XX
XX The clone was isolated from a human placenta lambda phage DNA
CC library. The sequence can be inserted into expression vectors for
CC the prodn. of recombinant meg-CSF. The protein is used to treat
CC bleeding disorders and platelet deficiencies.
CC See also R10870, R10871 and R10872.
XX
SQ Sequence 40 AA:

Query Match 100.0%; Score 53; DB 12; Length 40;
Best Local Similarity 19.0%; Pred. No. 1.4e+02;
Matches 4; Conservative 17; Mismatches 0; Indels 0; Gaps 0;

QY 1 CXXXCXXXXXXXXXXCXXC 21
|::|::|::|::|::|::|::|
DB 4 ckgcfesferygcdcdagc 24

RESULT 3
ID W02648
XX W02648 standard; peptide; 49 AA.
XX AC
XX W02648;
XX
XX 23-OCT-1996 (first entry)
XX DT
XX
XX Mutant disintegrin amino acid sequence.
DE
XX Wild type; RGD motif; ecstatin; disintegrin; binding activity.
XX
XX Synthetic.
XX OS
XX Key Location/Qualifiers
FH Domain 24..26
FT /note= "RGD domain"
XX
XX JP08157496-A.
XX PD 18-JUN-1996.
XX 30-NOV-1994; 94JP-0296474.
XX 30-NOV-1994; 94JP-0296474.
XX PR
XX

```

PA (TANP-) TANPAKU KOGAKU KENKYUSHO KK.
XX
DR WPI: 1996-339190/34.
XX
PT A mutant disintegrin - contg. Cys residues flanking the RGD
PT functional site to cyclise it
XX
PS Disclosure: Fig 1: 6pp; Japanese.
XX
CC This is the amino acid sequence of a mutated sequence surrounding the
CC RGD peptide motif in ecstasin, a member of the disintegrin family. The
CC amino acids immediately flanking the RGD motif were mutated to Cys
CC residues in order to circularise the RGD motif. The peptides were
CC synthesised using a peptide synthesiser and their integrin binding
CC activities determined and compared.
XX
SQ Sequence 49 AA:

Query Match 100.0%; Score 53; DB 17; Length 49;
Best Local Similarity 19.0%; Pred. No. 1.6e+02;
Matches 4; Conservative 17; Mismatches 0; Indels 0; Gaps 0;

QY 1 CXXXCXXXXXXXXXXCXXC 21
   1::1:::1:::1:::1:::1
Db 7 ccrnckf1kcgfclckrrcgdc 27

RESULT 4
V57813
ID Y57813 standard; protein: 57 AA.
XX
AC Y57813;
XX
DT 22-MAR-2000 (first entry)
XX
DE Crab metallothionein Class I amino acid sequence.
XX
KW Metallothionein; metal recovery; remediation; heavy metal;
XX precious metal; phycochelatin; green algae; Chlamydomonas reinhardtii.
XX
OS Eubrachyura.
XX
PN W09960838-A1.
XX
PD 02-DEC-1999.
XX
PE 28-MAY-1999; 99WO-US12007.
XX
PR 28-MAY-1998; 98US-0087374.
XX
PA (OHIS ) UNIV OHIO STATE RES FOUND.
XX
PI Sayre RT, Traina SJ;
XX
WPI: 2000-086646/07.
XX
PT Novel method for metal recovery, remediation and separation -
XX
PS Disclosure: Page 6; 86pp; English.
XX
CC The present invention describes a transgenic algal cell (1) of the
CC genus Chlamydomonas comprising reproductive genetic material comprisg
CC a nucleotide sequence capable of expressing chicken type I
CC Metallothionein. Also described is a method of removing metal from
CC an aqueous medium containing at least one dissolved or suspended
CC metal. The transgenic algae are used for the selective separation of
CC metals, particularly the separation of precious and desirable metals
CC such as gold and uranium, from other metals such as cadmium, zinc and
CC copper. The method can be used to facilitate the selective recovery of
CC precious and rare metals from mineral sources where aqueous media can
CC be used, such as in natural surface water flows, ground water and where
CC water may be introduced. The method is suitable for well-drilling,

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CC	soil and water remediation arts, mining fields, and industrial
CC	engineering. The present sequence represents a Class I metallochionein
CC	given in the present invention.
XX	
XX	Sequence 57 AA:
Query Match	100.0%; Score 53; DB 21; Length 57;
Best Local Similarity	19.0%; Pred. No. 1.8e+02;
Matches 4; Conservative 17; Mismatches 0; Indels 0; Gaps 0;	
OY	1 CXXXCXXXXXXXXXXCXXC 21
	1::1::1::1::1::1::1::1
Db	33 csgcckanckegckrckscpc 53
RESULT 5	
ID	Y76185 standard; Protein; 57 AA.
XX	Y76185;
AC	
XX	23-MAR-2000 (first entry)
DT	
DE	Human secreted protein encoded by gene 62.
XX	
KW	Human; secreted protein; cancer; tumour; developmental abnormality;
KW	fetal deficiency; blood disorder; immune system disorder; inflammation;
KW	autoimmune disease; allergy; Alzheimer's disease; cognitive disorder;
KW	schizophrenia; arthritis; asthma; psoriasis; sepsis; skin disorder;
KW	atherosclerosis; diabetes; cardiovascular disorder; kidney disorder;
KW	digestive disorder; endocrine disorder; infection; AIDS; leukaemia;
KW	therapy.
XX	
OS	Homo sapiens.
XX	
PN	W0958660-A1.
XX	
PD	18-NOV-1999.
XX	
PE	06-MAY-1999; 99WO-US09847.
XX	
PR	12-MAY-1998; 98US-0085093.
PR	12-MAY-1998; 98US-0085094.
PR	12-MAY-1998; 98US-0085105.
PR	12-MAY-1998; 98US-0085180.
PR	18-MAY-1998; 98US-0085906.
PR	18-MAY-1998; 98US-0085920.
PR	18-MAY-1998; 98US-0085921.
PR	18-MAY-1998; 98US-0085922.
PR	18-MAY-1998; 98US-0085923.
PR	18-MAY-1998; 98US-0085924.
PR	18-MAY-1998; 98US-0085928.
PR	18-MAY-1998; 98US-0085925.
PR	18-MAY-1998; 98US-0085927.
XX	
PA	(HUMA-) HUMAN GENOME SCI INC.
XX	
PI	Ruben SM, Florence K, Ni J, Rosen CA, Carter KC, Moore PA;
PI	Olsen HS, Shi Y, Young PE, Wei F, Brewer LA, Soppet DR;
PI	Latleur DW, Endress GA, Ebner R;
XX	
XX	WPI: 2000-062296/05.
DR	N-PSDB: 265311.
XX	
XX	New isolated human genes and the secreted polypeptides they encode,
PT	useful for diagnosis and treatment of e.g. cancers, neurological
PT	disorders, immune diseases, inflammation or blood disorders -
XX	
PS	Claim 11; Page 398; 475pp; English.
XX	
XX	265250 to 265350 represent 97 isolated human secreted protein genes.
CC	Y76124 to Y76223 represent the secreted proteins encoded by the 97 human

[illegible]

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CC      See also R05623.
XX
SQ      Sequence      70 AA:

Query Match          100.0%; Score 53; DB 11; Length 70;
Best Local Similarity 19.0%; Pred. NO. 2.2e+02;
Matches 4; Conservative 17; Mismatches 0; Indels 0; Gaps 0
QY      1 CXXXCXXXXXXXXXXCXXXC 21
       1::|::|::|::|::|::|::|
DB      23 cngctkvhyadkyocllsc 43

RESULT 9
R11173
ID      R11173 standard; Protein; 70 AA.
XX
XX      R11173;
AC
DT      24-MAY-1991 (first entry)
XX
DE      Deduced sequence of AaIT.
XX
XX      Insecticide; toxin; scorpion; signal peptide; interleukin 2; IL-2.
XX      Androctonus australis.
XX      EP417906-A.
XX      20-MAR-1991.
XX      PD
XX      PF 10-AUG-1990; 90EP-0308824.
XX      PR 11-AUG-1989; 89US-0392864.
XX      (ELIL ) ELI LILLY & CO.
XX      PA
XX      PI Lal MH, Belagaje RM;
XX      DR WPI: 1991-082139/12.
XX      N-PSDB; Q111011.
XX
XX      Functional, insect toxin prodn. from recombinant eucaryotic cells
XX      PT - transformed with DNA encoding scorpion toxin and mammalian
XX      PT signal peptide, useful as insecticide.
XX
XX      Disclosure: Page 27; 61pp; English.
XX
XX      The scorpion neurotoxin gene can be ligated to a signal sequence, esp.
XX      CC from human IL-2, for the expression of recombinant toxin. The
XX      CC protein is selectively toxic towards insects.
XX      CC See also R11174.
XX
SQ      Sequence      70 AA:

Query Match          100.0%; Score 53; DB 12; Length 70;
Best Local Similarity 19.0%; Pred. NO. 2.2e+02;
Matches 4; Conservative 17; Mismatches 0; Indels 0; Gaps 0;
QY      1 CXXXCXXXXXXXXXXCXXXC 21
       1::|::|::|::|::|::|::|
DB      23 cngctkvhyadkyocllsc 43

RESULT 10
R56468
ID      R56468 standard; Protein; 70 AA.
XX
XX      R56468;
AC
DT      13-MAR-1995 (first entry)
XX
```

XX AaIT encoded by codon optimised AaIT gene.
DE Codon optimised; native; B. mori; PBHMP-12; signal peptide; chorion;
XX insect controlling protein; toxin; AaIT; baculovirus; AcMNPV; Cry IVD;
KM expression; secretion; toxin-induced paralysis; cuticle; apolipophorin;
KM sex-specific; adipokinetic; esterase-6; D. melanogaster; neuropeptide;
KM M. sexta; enzyme; Pyemotes tritici; B. thuringiensis; diuretic hormone;
KM eclosion hormone; prothoracotropic hormone; adipokinetic hormone;
KM proctolin; juvenile hormone esterase.
XX
OS Androctonus australis.
XX
PN EP608696-A.
XX
PD 03-AUG-1994.
XX
PP 10-JAN-1994; 94EP-0100265.
XX
PR 25-JAN-1993; 93US-0009265.
XX
PA (AMCY) AMERICAN CYANAMID CO.
XX
PI Black BC;
XX
DR WPI: 1994-242108/30.
DR N-PSDB; Q67698.
PT Heterologous signal sequences for secretion of insect controlling
PT proteins - useful to protect plants from insect pests
XX
PS Disclosure; Page 42; 69pp; English.
XX
CC The sequences given in R56468-69 are encoded by codon optimised and
CC native coding sequences for the A. australis insect specific toxin,
CC AaIT, respectively. The protein coding sequences may be used with a
CC DNA sequence encoding a heterologous signal sequence, eg. the D.
CC melanogaster cuticle signal sequence or the B. mori sex specific signal
CC sequence (see also Q67685-97). The fusion sequence may be introduced
CC into an insect virus, such as the baculovirus AcMNPV. The insertion of
CC the AaIT gene and the heterologous signal sequence into a baculovirus
CC results in the expression and secretion of the toxin. A susceptible
CC insect which ingests such a modified baculovirus will cease feeding
CC on plants due to toxin-induced paralysis at an earlier time than an
CC insect which ingests a wild-type baculovirus, thus reducing crop
CC damage.
XX
SQ Sequence 70 AA:

Query Match 100.0%; Score 53; DB 15; Length 70;
Best Local Similarity 19.0%; Pred. No. 2.2e+02;
Matches 4; Conservative 17; Mismatches 0; Indels 0; Gaps 0;

QY 1 CXXXCXXXXXXXXXXCXXC 21
1:::1:::1:::1:::1:::1:::1
DB 22 cnectkvnyadkgyccllsc 42

RESULT 11
R56469
ID R56469 standard; Protein: 70 AA.
AC R56469;
XX
XX 13-MAR-1995 (first entry)
DT
XX AaIT encoded by native AaIT gene.
DE
XX Codon optimised; native; B. mori; PBHMP-12; signal peptide; chorion;
KM insect controlling protein; toxin; AaIT; baculovirus; AcMNPV; Cry IVD;
KM expression; secretion; toxin-induced paralysis; cuticle; apolipophorin;
KM sex-specific; adipokinetic; esterase-6; D. melanogaster; neuropeptide;

KM M. sexta; enzyme; Pyemotes tritici; B. thuringiensis; diuretic hormone;
KM eclosion hormone; prothoracotropic hormone; adipokinetic hormone;
KM proctolin; juvenile hormone esterase.
XX
OS Androctonus australis.
XX
PN EP608696-A.
XX
PD 03-AUG-1994.
XX
PP 10-JAN-1994; 94EP-0100265.
XX
PR 25-JAN-1993; 93US-0009265.
XX
PA (AMCY) AMERICAN CYANAMID CO.
XX
PI Black BC;
XX
DR WPI: 1994-242108/30.
DR N-PSDB; Q67699.
PT Heterologous signal sequences for secretion of insect controlling
PT proteins - useful to protect plants from insect pests
XX
PS Disclosure; Page 43-44; 69pp; English.
XX
CC The sequences given in R56468-69 are encoded by codon optimised and
CC native coding sequences for the A. australis insect specific toxin,
CC AaIT, respectively. The protein coding sequences may be used with a
CC DNA sequence encoding a heterologous signal sequence, eg. the D.
CC melanogaster cuticle signal sequence or the B. mori sex specific signal
CC sequence (see also Q67685-97). The fusion sequence may be introduced
CC into an insect virus, such as the baculovirus AcMNPV. The insertion of
CC the AaIT gene and the heterologous signal sequence into a baculovirus
CC results in the expression and secretion of the toxin. A susceptible
CC insect which ingests such a modified baculovirus will cease feeding
CC on plants due to toxin-induced paralysis at an earlier time than an
CC insect which ingests a wild-type baculovirus, thus reducing crop
CC damage.
XX
SQ Sequence 70 AA:

Query Match 100.0%; Score 53; DB 15; Length 70;
Best Local Similarity 19.0%; Pred. No. 2.2e+02;
Matches 4; Conservative 17; Mismatches 0; Indels 0; Gaps 0;

QY 1 CXXXCXXXXXXXXXXCXXC 21
1:::1:::1:::1:::1:::1:::1
DB 22 cnectkvnyadkgyccllsc 42

RESULT 12
R57967
ID R57967 standard; Protein: 70 AA.
AC R57967;
XX
XX 11-APR-1995 (first entry)
DT
XX AaIT encoded by the optimised nucleic acid sequence.
DE
XX Codon optimisation; Androctonus australis; insect; toxin; AaIT;
KM contractile paralysis; virus; expression; crop plant.
XX
XX Androctonus australis.
OS
XX A09453967-A.
PN
XX
XX 28-JUL-1994.
PD
XX 24-JAN-1994; 94AU-0053967.
PF
XX

Db 23 cngctkvhyadkgycc11sc 43

RESULT 15

ID R10870 standard; Protein; 73 AA.

AC R10870;

DT 08-MAY-1991 (first entry)

Exon I encoded by genomic meg-CSF clone.

KM megakaryocyte colony stimulating factor; platelet deficiency;
KM bleeding disorder.

OS Homo sapiens.

PN WO9102001-A.

PD 21-FEB-1991.

PF 07-AUG-1990; 90WO-US04421.

PR 29-JUN-1990; 90US-05461.14.

PR 28-DEC-1989; 89US-0457196.

PA (GENE-) GENETICS INST INC.

PI Gesner TG, Clark SC, Tur

DR WPI; 1991-073490/10.

XX
XX

PT human haematopoietic

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CC The clone was isolated from a human placenta lambda phage DNA
CC library. The sequence can be inserted into expression vectors for
CC the prodn. of recombinant meg-CSF. The protein is used to treat
CC bleeding disorders and platelet deficiencies.
CC See also R11372, R10871 and R10872.

50 Sequence 73 AA;

Query Match	100.0%	Score 53;	DB 12;	Length 73;
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Best Local Similarity	19.0%;	Pred. No.	2.3e+02;						
Matches	4;	Conservative	17;	Mismatches	0;	Indels	0;	Gaps	0;

QY 1 CXXXXCXXXXXXXXXXXXCXXXC 21

Db 37 cagrcgegyrsrdatcncdync 57

Search completed: March 1, 2001, 16:18:28
Job time: 497 sec